



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0276; Product Identifier 2017-NM-079-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain The Boeing Company Model 747-100, -100B, -100B SUD, -200B, -200C, -200F, -300, -400, -400D, 747SP, and 747SR, and 747-8 series airplanes. This proposed AD was prompted by reports indicating that additional areas of Boeing Material Specification (BMS) 8-39 flexible urethane foam were found during an inspection required by a related AD. This proposed AD would require inspecting for BMS 8-39 flexible urethane foam insulation in the floor panel assemblies and the power drive unit (PDU) cover assemblies; doing applicable on-condition actions; modifying certain dripshields; and replacing BMS 8-39 foam strips on certain dripshields with BMS 8-371 foam strips. We are proposing this AD to address the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0276.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0276; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Scott Craig, Aerospace Engineer,
Cabin Safety and Environmental Systems Section, FAA, Seattle ACO Branch, 2200
South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3566; email:
Michael.S.Craig@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2018-0276; Product Identifier 2017-NM-079-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

We have received reports indicating that additional areas of BMS 8-39 flexible urethane foam were found during the accomplishment of AD 2013-11-04, Amendment 39-17464 (78 FR 33193, June 4, 2013) (“AD 2013-11-04”). AD 2013-11-04 was prompted by in-service reports of burned BMS 8-39 flexible urethane foam, and a report from the airplane manufacturer indicating that airplanes were assembled, throughout various areas of the airplane (including flight deck and cargo compartments), with seals made of BMS 8-39 flexible urethane foam, a material with fire-retardant properties that

deteriorate with age. AD 2013-11-04 requires replacing certain seals made of BMS 8-39 flexible urethane foam.

BMS 8-39 flexible urethane foam fire retardants are mixed into, but are not chemically connected with, the remaining components of the foam. Over time, this condition will cause the fire-retardant properties to have decreased effectiveness. The concern is hidden areas where fire cannot easily be detected and suppressed. Aged BMS 8-39 flexible urethane foam exposed to an ignition source provides an unacceptable fuel source for fire propagation. The degradation of the foam increases the potential for an uncontrolled fire below the passenger compartment floor and other locations outside the areas covered by smoke detection and fire protection systems. This condition, if not corrected, could cause an uncontrolled fire leading to loss of control of the airplane.

Related Service Information under 1 CFR part 51

We reviewed the following Boeing service information.

- Boeing Special Attention Service Bulletin 747-53-2877, dated August 5, 2014, which describes procedures for performing a general visual inspection for BMS 8-39 flexible urethane foam insulation in the floor panel assemblies and the PDU cover assemblies, and applicable on-condition actions.

- Boeing Special Attention Service Bulletin 747-25-3646, Revision 1, dated August 2, 2017, which describes procedures for replacing BMS 8-39 foam strips with BMS 8-371 foam strips on certain dripshields.

- Boeing Special Attention Service Bulletin 747-25-3692, dated June 22, 2016, which describes procedures for modifying and replacing BMS 8-39 foam strips with BMS 8-371 foam strips on certain dripshields.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would require accomplishment of the actions identified as “RC” (required for compliance) in the Accomplishment Instructions of the service information described previously, except as discussed under “Differences Between this Proposed AD and the Service Information,” and except for any differences identified as exceptions in the regulatory text of this proposed AD.

For information on the procedures and compliance times, see this service information at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0276.

Differences Between this Proposed AD and the Service Information

Although Boeing Special Attention Service Bulletin 747-25-3646, Revision 1, dated August 2, 2017, and Boeing Special Attention Service Bulletin 747-25-3692, dated June 22, 2016, specify a compliance time of 60 months, this AD specifies a compliance time of 72 months for the actions specified in this service information. The 72-month compliance time is in-line with other ADs addressing the same unsafe condition due to the use of BMS 8-39 flexible urethane foam. We have reviewed the safety impact of the 72-month compliance time and found it acceptable. This compliance time has been coordinated with Boeing.

Costs of Compliance

We estimate that this proposed AD affects 87 airplanes of U.S. registry. We estimate the following costs to comply with this proposed AD:

Estimated costs

| Action | Labor cost | Parts cost | Cost per product | Cost on U.S. operators |
|--|---|--------------------------|--------------------|---|
| Inspection and replacement | 25 work-hour X \$85 per hour = \$2,125 | Up to \$184,460 | Up to \$186,585 | Up to \$6,157,305 (33 airplanes affected) |
| Modification and installation of the dripshields | 10 work-hours X \$85 per hour = \$850 | Unavailable ¹ | \$850 | \$44,200 (52 airplanes affected) |
| Replacement of the foam on the dripshields | 8 work-hours X \$85 per hour = \$680 | Unavailable ¹ | \$680 | \$4,760 (7 airplanes affected) |

¹ We have received no definitive data that would enable us to provide parts cost estimates as the parts and materials are to be supplied by the operator for the actions specified in this AD.

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this proposed AD.

According to the manufacturer, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all available costs in our cost estimate.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by

prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This proposed AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

The Boeing Company: Docket No. FAA-2018-0276; Product Identifier 2017-NM-079-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company airplanes, certificated in any category, as identified in paragraphs (c)(1), (c)(2), and (c)(3) of this AD.

(1) Model 747-100, -100B, -100B SUD, -200B, -200C, -200F, -300, -400, -400D, 747SP, and 747SR series airplanes, as identified in Boeing Special Attention Service Bulletin 747-53-2877, dated August 5, 2014.

(2) Model 747-400, -400D, and 747-8 series airplanes, as identified in Boeing Special Attention Service Bulletin 747-25-3646, Revision 1, dated August 2, 2017.

(3) Model 747-100, -100B, -100B SUD, -200B, -300, 747SP, and 747SR series airplanes, as identified in Boeing Special Attention Service Bulletin 747-25-3692, dated June 22, 2016.

(d) Subject

Air Transport Association (ATA) of America Code 25, Equipment/furnishings; 53, Fuselage.

(e) Unsafe Condition

This AD was prompted by reports indicating that additional areas of Boeing Material Specification (BMS) 8-39 flexible urethane foam were found during an inspection required by a related AD. The degradation of the foam increases the potential for an uncontrolled fire below the passenger compartment floor and other locations outside the areas covered by smoke detection and fire protection systems. We are issuing this AD to detect and replace BMS 8-39 flexible urethane foam in certain areas, which, if exposed to an ignition source, could cause an uncontrolled fire leading to loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

Within 72 months after the effective date of this AD, do all actions identified as “RC” (required for compliance) in, and in accordance with, the Accomplishment Instructions of the applicable service information identified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD.

(1) For airplanes identified in paragraph (c)(1) of this AD: Boeing Special Attention Service Bulletin 747-53-2877, dated August 5, 2014.

(2) For airplanes identified in paragraph (c)(2) of this AD: Boeing Special Attention Service Bulletin 747-25-3646, Revision 1, dated August 2, 2017.

(3) For airplanes identified in paragraph (c)(3) of this AD: Boeing Special Attention Service Bulletin 747-25-3692, dated June 22, 2016.

(h) Credit for Previous Actions

This paragraph provides credit for the actions specified in paragraph (g)(2) of this AD, if those actions were performed before the effective date of this AD using Boeing Special Attention Service Bulletin 747-25-3646, dated June 19, 2015.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j)(1) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO Branch, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (i)(4)(i) and (i)(4)(ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled “RC Exempt,” then the RC requirement is removed from that step or substep. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator’s maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(j) Related Information

(1) For more information about this AD, contact Scott Craig, Aerospace Engineer, Cabin Safety and Environmental Systems Section, FAA, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3566; email: Michael.S.Craig@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

Issued in Des Moines, Washington, on March 29, 2018.

Chris Spangenberg,
Acting Director,
System Oversight Division,
Aircraft Certification Service.

